Raising Expectations for Mathematics Instruction in California: Algebra and Beyond

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Joins district leaders, researchers, state policy actors, and funders in on-going evidence-based dialogue and collective action to improve instruction and student learning in California school systems.

District participants: Long Beach USD, Los Angeles USD, Garden Grove USD, Fresno USD, Oakland USD, Sacramento USD, San Bernardino USD, San Francisco USD, Sanger USD, (Hayward USD)
How can we best ensure success for all students in algebra and higher mathematics?

- Clarify goals for mathematics instruction
- Focus and deepen mathematics instruction, K-12
- Develop systems and evidence-based criteria for more effective and equitable placement into algebra and advanced mathematics course. Consider:
  - Student mathematics pathways
  - Issues of equity and access
Data should inform approach to algebra

- Mathematics proficiency and course passing rates
- Mathematics artifacts
  - Course pathways
  - Course loads and class sizes
  - Quality of algebra content and instruction
- Language proficiency
- Student enrollment trends
- Instructional capacity
  - Numbers of G8 and G9 math teachers qualified to teach algebra
  - Potential for moving qualified teachers where most needed
  - Potential retirements
Instructional capacity to support student success

- Review qualifications of current mathematics teachers
- Build capacity through recruitment, retention, reassignment
  - Incentives for re-assignment, hard-to-staff subjects
  - Integrate HR and academic leadership
  - Empower mathematics departments
- Provide high quality professional development in math
  - Build professional learning communities
  - Provide content-focused PD
Effective support for struggling students

- Provide tiered/differentiated support
  - In-class supports
  - Lower intensity outside-of-class support
  - Higher intensity outside-of-class support

- Targeted support for subpopulations (ELs)
Recommendations for the state

- Allow districts to make enrollment decisions
- Re-examine state adopted standards and texts
- Provide diagnostic data on student performance
- Review credentialing criteria
- Consider alternative strategies to build pool of qualified mathematics teachers.
- Examine and realign accountability and support programs
- Allocate resources toward addressing issues of ELs in algebra and other mathematics course
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